

## Chapter V

### TRANSPORTATION AND PUBLIC UTILITIES

#### INTRODUCTION

The transportation system of Waukesha County provides the basis for movement of goods and people into, out of, through, and within the County. An efficient transportation system is essential to the sound social and economic development of the County and of the Region of which the County is a part. An understanding of the existing transportation system is therefore fundamental to the preparation of a comprehensive development plan for the County.

Public utility systems are among the most important and permanent elements influencing the growth and development of the County. These utilities and the land use pattern which they serve and support are mutually interdependent in that the land use pattern determines the demand for, and loadings upon, the utility systems; the utility systems, in turn, form a basic framework for land use development. Such public utility systems are, moreover, closely linked to the natural resource base, constituting, in effect, extensions to, or modifications of, the surface-water and groundwater systems. For these reasons, information regarding existing public utility systems is also essential to the comprehensive planning process.

Accordingly, this chapter presents a description of existing transportation and public utility facilities in Waukesha County. Included are descriptions and analyses of the existing arterial street and highway system, public transit facilities, railway facilities, airport facilities, bikeways, sanitary sewerage facilities, water supply facilities, and stormwater management facilities. Also presented in this chapter is a description of those quasi-public utilities upon which urban development is highly dependent: electric power, natural gas, and communication systems. Solid waste disposal and recycling activities in the County are described in this chapter as well.

#### TRANSPORTATION FACILITIES

##### Arterial Streets and Highways

The arterial street and highway system serving Waukesha County in 1991 is shown on Map 51. As

shown on Map 51, the existing arterial network in the eastern portion of the County is relatively densely spaced, with arterials occurring at about one-mile intervals in both the north-south and east-west directions. The existing arterial network in the rest of the County is less densely spaced, with arterials occurring at about two- to three-mile intervals. The arterial system totals 721 miles in length, with about 60 miles, or 8 percent, consisting of freeways and about 661 miles, or 92 percent, consisting of standard arterial streets.

Four freeways, IH 94, IH 43, USH 41/45, and STH 16, serve Waukesha County. As shown on Map 51, a 24.6-mile segment of the IH 94 freeway traverses the entire County in an east-west direction from the City of Brookfield on the east to the Oconomowoc area on the west; a 16.3-mile segment of the IH 43 freeway traverses the southeast portion of the County through the City of New Berlin, the Town of Vernon, and the Town and Village of Mukwonago; a 3.6-mile segment of the USH 41/45 freeway traverses the far northeast portion of the County through the Village of Menomonee Falls; and a 15.2-mile segment of the STH 16 freeway traverses the northwest portion of Waukesha County, serving the Pewaukee, Hartland and Oconomowoc areas.

The jurisdictional responsibilities for the arterial street and highway system, as they existed in 1991, are also shown on Map 51 and summarized in Table 56. Of the 721-mile arterial system, about 231 miles, including about 60 miles of freeway and about 171 miles of standard arterial, or 32 percent, consisted of State trunk highways; about 320 miles, or 44 percent, consisted of County trunk highways; and about 170 miles, or 24 percent, were under local jurisdiction.

Annual average weekday traffic volumes for the arterial street and highway system in Waukesha County for the year 1991 are depicted on Map 52. As indicated on Map 52, traffic volumes on the IH 94 freeway in the eastern portion of the County between the Milwaukee-Waukesha County line and the interchange with USH 18 averaged more than 90,000 vehicles per day in 1991. Traffic volumes on IH 94 in the rest of Waukesha County were also